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## CLAIMS:

1. A method of recording a transfer of a piece of data, the method comprising the steps of:

5 determining whether a database contains a record that has data which represents the piece of data; and  
upon determining that the database contains the record, setting one or more counters, which represent a total amount of the data in the record that has been  
10 transferred, such that the amount includes a quantity of the piece of data, to thereby record the transfer of the data.

2. The method as claimed in claim 1, further  
15 comprising the step of setting the data in the record to correspond with an indicator that has a byte count less than a byte count of the piece of data.

3. The method as claimed in claim 1 or 2,  
20 wherein the step of determining whether the database contains the record comprises the steps of:  
obtaining a first storage location in the database using a hash function  $f(K)$ , wherein  $K$  is the piece of data; and  
25 checking whether the record is at the first storage location.

4. The method as claimed in any one of the preceding claims, wherein the step of setting the one or  
30 more counters comprises the steps of:  
adding to a first of the counters a quantity of bytes of the piece of data; and  
incrementing a second of the counters by a number of data packets associated with the piece of data.

35 5. The method as claimed in any one of the preceding claims, further comprising the step of creating

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the record in the database upon determining that the database does not contain the record.

6. The method as claimed in claim 5, wherein  
5 the step of creating the record comprises the steps of:  
obtaining a second storage location in the  
database using the hash function  $f(K)$ , wherein  $K$  is the  
piece of data; and  
storing the record at the second storage  
10 location.

7. The method as claimed in any one of the  
preceding claims, further comprising the step of selecting  
the piece of data from other data associated therewith.  
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8. The method as claimed in claim 7, wherein  
the selecting step comprises selecting the piece of data  
based on whether a temporal parameter associated therewith  
meets a predefined criterion.  
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9. The method as claimed in claim 8, wherein  
the predefined criterion comprises the temporal parameter  
having a value that is within a range of temporal values.

10. The method as claimed in claim 8 or 9,  
25 further comprising the step of setting a temporal field of  
the record based on the temporal parameter.

11. The method as claimed in any one of claims  
30 8, 9 or 10, wherein the temporal parameter comprises a time  
and/or date stamp.

12. Computer software which contains  
instructions that enable a computer to carry out the method  
35 claimed in any one of claims 1 to 13.

13. A computer readable medium comprising the

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software claimed in claim 14.

14. A apparatus of recording a transfer of a piece of data, the system comprising:

5       determining means arranged to determine whether a database contains a record that has data which corresponds to the piece of data; and

      setting means arranged to set, upon determining that the database contains the record, one or more  
10       counters, which represent a total amount of the data in the record that has been transferred, such that the amount includes a quantity of the piece of data to thereby record the transfer of the data.

15       15. The apparatus as claimed in claim 14, wherein the setting means is further arranged to set the data field to correspond with an indicator that has a first byte count less than a second byte count of the piece of data.

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      16. The apparatus as claimed in claim 14 or 15, wherein the determining means is arranged to determine whether the database contains the record by:

      obtaining a first storage location in the  
25       database using a hash function  $f(K)$ , wherein  $K$  is the piece of data; and

      checking whether the record is at the first storage location.

30       17. The apparatus as claimed in any one of claims 14 to 16, wherein the setting means is arranged to set the one or more counters by adding to a first of the counters a quantity of bytes of the piece of data, and incrementing a second of the counters by a number of data  
35       packets associated with the piece of data.

      18. The apparatus as claimed in any one of

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claims 14 to 17, further comprising creating means arranged to create the record in the database upon the determining means determining that the database does not contain the record.

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19. The apparatus as claimed in claim 18, wherein the creating means is arranged to create the record by:

10 obtaining a second storage location in the database using the hash function  $f(K)$ , wherein  $K$  is the piece of data; and

storing the record at the second storage location.

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20. The apparatus as claimed in any one claims 14 to 19, further comprising selecting means arranged to select the piece of data from other data associated therewith.

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21. The apparatus as claimed in claim 20, wherein the selecting means is arranged to select the piece of data based on whether a temporal parameter associated therewith meets a predefined criterion.

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22. The apparatus as claimed in claim 21, wherein the predefined criterion comprises the temporal parameter having a value that is within a range of temporal values.

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23. The apparatus as claimed in claim 21 or 22, wherein the setting means is arranged to set a temporal field of the record based on the temporal parameter.

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24. The apparatus as claimed in any one of claims 21, 22 or 23, wherein the temporal parameter comprises a time and/or date stamp.

25. The method substantially as herein described

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with reference to the accompanying figures.

26. The apparatus substantially as herein described with reference to the accompanying figures.